Maximum Permissible Exposure (MPE) Evaluation

Applicant	:	JVC KENWOOD Corporation
Equipment	:	800MHz DIGITAL BASE-REPEATER
Model No.	:	NXR-5900-K
FCC ID	:	K44474700

MPE Calculations
FCC Part 1.1310

$$S = \frac{PG}{4\pi R^2}$$

$$R = \sqrt{\frac{PG}{4\pi S}}$$

Where:
S=Power density (in appropriate units, e.g. mW/cm^2)
P=Power input to antenna (in appropriate units, e.g., mW)
G=Power gain of the antenna in the direction of interest relative to an isotropic radiator
R=Distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Tx Frequency=	851 to 869	(MHz)	: FCC	
Maximum peak power=	25.56	(dBm)	(=0.36W)	
Antenna gain=	2.15	(dBi)		
S=	2.84	(mW/cm^2)		
P=	360.00	(mW)	(=Maximum peak power x Dutycycle100%)	
G=	1.64	(numeric)		
R=	4.07	(cm)		

P = Value calculated according to CFR Part 90.205(s)

Calculated minimum separation distance from antenna : 4.07 (cm)